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Millen White Zelano & Branigan
Arlington Courthouse Plaza I
Suite 1400
2200 Clarendon Boulevard
Arlington, VA 22201

EXAMINER

DICUS, TAMRA

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/446,326

Applicant(s)

DELP ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is nothing in the disclosure that teaches "irregular-shaped" particles or how to make a particle irregularly shaped. The Examiner will treat such particle as a laser-markable polymer.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how "the particle structure of the markable polymer is retained in the plastic".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 6-7, 9-10, 12, 16-17, 19, 20 and 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,422,383 to Takahashi et al.

6. Takahashi teaches a laser beam absorbing resin composition comprising a resin (plastic) inorganic colorant like metal oxide, titania at col. 3, lines 18-25, and a laser beam absorbing substance where the laser beam is irradiated on the surface of a shaped body to form a discriminative pattern on the surface of the shaped body manufactured in a mill at col. 1, lines 14-19 and Example 3, having a particle size between 0.1 and 50 microns at col. 1, lines 50-60 (equivalent to irregular-shaped micromilled particles). See also col. 2, lines 25-42. The thermoplastic resins used are polyethylene, polystyrene, acrylic, polyimide, and polyamide resins in Example 2 and col. 4, lines 10-20. The absorber resists high temperature (above 250 degrees C or more) at col. 2, lines 1-5 (claim 2). Colorants may also include copper oxalate, titanium yellow at col. 3, lines 10-25. A method of producing molding comprising marking with laser composition and moulding any shaped product is described in examples of Takahashi.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5, 12-13 of U.S. Patent No. 5,928,780 in view of WO/95/30716 (WO).

9. Although the conflicting claims are not identical, they are not patentable distinct from each other because the present claims differ only in the recitation of an absorber material in the form of irregular-shaped micromilled particles (equivalent "an additive,... a non-lustrous pigment containing a phyllosilicate having a non-platelet shaped surface"), and the particle size requirements are not shown by Schmidt. However, WO teaches making particles by milling in the claimed size. Therefore, it would have been obvious to one of ordinary skill in the art to make particles of size 1 to 100 microns given the teaches of WO. Further optimization of particle size is obvious.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 5,928,780 in view of WO/95/30716 (WO).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

11. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,928,780 to Schmidt et al. in view of WO/95/30716 (WO).
12. Schmidt teaches a laser-markable plastic composition comprising plastics functioning as laser absorbers having an irregular shaped surface (equivalent to plastic and absorber) such as polyurethane, polyolefins, acrylonitrile-styrene-acrylate (ASA) and polyethylene among others at col. 1, lines 20-35, col. 2, lines 23-30, and col. 3, lines 9-20 (meeting claims 9, 15, 20,) and a light sensitive pigment such as phyllosilicate, metal oxides of TiO₂ and Fe₂O₃ (metal is iron) (see col. 2, lines 55-67) is also included, all aforementioned plastics and additives are the same as Applicant's, thereby meeting claims 6, 7, 19, 22, and 24-26. The particles are micromilled in Example 1. Further addressing claim 26, at col. 2, lines 25-33, Schmidt shows all the compositions listed in instant claim 26.

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13. Schmidt teaches at col. 2, lines 49-50 a further color pigment may be added, meeting claim 10.

14. Schmidt teaches at col. 2, lines 33-40, the pigments being added between 0.01 to 4% by weight, falling within the claimed range of 0 to 5% by weight as recited in instant claims 8, 13, and 14.

15. Regarding the absorber property, e.g. "high-temperature-resistant" plastic recited in claim 2, this property is taught by Schmidt since the same laser process is taught and the same polymer materials are used.

16. Regarding the melting point greater than 300 degrees C (instant claims 18), this is also an inherent property as the same exact polymers are used.

17. Schmidt does not teach the particle size, however, WO teaches laser-markable plastics where laser-marked polymer particles are between 1 and 100 microns at page 25, lines 1-25, meeting limitations of claims 1, 16, 17, and 23. Hence, it would have been obvious to one of ordinary skill in the art to modify the composition of Schmidt to have a size within 1 and 100 microns since WO teaches it is conventional to use this size particle range.

18. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 95/30716 in view of EP 0367 629.

19. EP is still relied upon as it shows the same materials and process to a laser absorbed polymeric composition.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 6,028,134 to Zhang et al. teaches a thermoplastic resin composition having

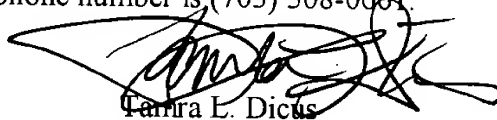
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laser marking ability. USPN 5,977,514 to Feng et al. teaches controlled color laser marking of plastics.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8329 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Tamra L. Dicus
Examiner
Art Unit 1774

June 12, 2003

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

